Forests and trees in global context

Sustainable food systems
Forests and trees play a key role in many food systems. Directly, they provide people with nutritious foods, and indirectly they provide ecosystem services and income. Food from trees and forests will be increasingly important in the face of challenges from population growth and climate change.

Nutritious diets
People who use foods from forests have significantly more diverse and nutritious diets. Forests provide a diversity of options for obtaining a balance of essential vitamins and minerals from leafy vegetables, fruits, nuts and other plant sources. In addition to these micronutrients, forests also supply macronutrients as carbohydrates from fruits and tubers and protein and fat from animals.

Improved livelihoods
According to the most recent Global Forest Resource Assessment, food is by far the largest category of non-timber forest products (NTFPs) harvested. More than 1.6 billion people – almost 1 in 5 – depend on forests for their livelihoods. The food from forests and trees contributes to household food security by helping to combat hunger and malnutrition directly but also indirectly; it can be sold and the income spent on food. Forest and tree foods are particularly important during emergency periods such as drought, which may increase as a result of climate change.

Threats
Among the most serious threats is the degradation of traditional food-yielding systems, such as parklands in West Africa, as a result of demographic pressure, droughts, desertification and agricultural practices. Other risks include competitive exploitation of NTFPs and conflict between the use of a single species for timber and food products.

Bioversity International is working on three projects focused on food tree species in Sub-Saharan Africa

Objectives:
- Identify main threats to these species to develop strategies for their conservation.
- Assess their relative importance in the diet: how they contribute to food shortages.
- Identify all native tree species consumed by rural communities during food shortages.
- Assess their relative importance in the diet: how they contribute to the diet, how frequently they are used, what parts of the plant are consumed and how are they processed.
- Identify main threats to these species to develop strategies for their conservation.

Food trees for food shortages
Gathering data through interviews with focus groups, households and key informants in Benin, Burkina Faso, Mali, Madagascar, Niger and Togo.

Objectives:
- To understand patterns of change in the mosaic of land uses under increasing immigration pressure and other socio-economic changes, and the effect of these changes on land tenure and access to food tree resources.
- To understand how changing and intensifying land use and associated habitat fragmentation, in combination with climate-induced reduction of suitable habitat and overexploitation, affect viability and vulnerability of key food tree species.
- To produce management guidelines and recommendations for conservation and sustainable use of key food tree species, and policy briefs.

Beyond Timber: Reconciling the needs of the logging industry with those of forest-dependent people
The project aims to facilitate multiple use of forest resources in the Congo Basin through innovative management.

Objectives:
- To improve local capacity to propagate and cultivate important food tree species.
- To produce management guidelines and recommendations for conservation and sustainable use of key food tree species, and policy briefs.

Threats to priority food trees in Burkina Faso
The project looks at two model species: Vitellaria paradoxa (karité) and Parkia biglobosa (nééré).

Objectives:
- To assess resource inventories and impact of timber harvesting for priority tree species that produce both timber and food.
- To understand how changing and intensifying land use and associated habitat fragmentation, in combination with climate-induced reduction of suitable habitat and overexploitation, affect viability and vulnerability of key food tree species.
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